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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,888	07/24/2001	Yasushi Sogabe	YMOR:216	3099

7590 03/13/2003
Parkhurst & Wendel
1421 Prince Street Suite 210
Alexandria, VA 22314-2805

EXAMINER

GRAY, DAVID M

ART UNIT PAPER NUMBER

2851

DATE MAILED: 03/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,888

Applicant(s)

SOGABE ET AL.

Examiner

David M Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Applicant incorrectly uses the terms “rotating surfaces portion”, “rotating secondary curved surface” and “rotating center axis.” These surfaces are rotationally symmetrical but they are not rotating.
4. The claimed “the projecting surface of said rotating surface portion” is indefinite. Applicant defines a “convex surface of a secondary curved surface” but does not define any “projecting surface of said rotating surface portion.”

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al.
7. The claimed “reflecting member” is met by surface 24B of convex mirror 24. This surface is clearly “a convex surface” as claimed. The claimed “cylindrical portion” is met by the

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disk-like base 24A and/or the cylinder that lies between the convex surface 24B and disk-like base 24A. Kato et al. states, "hemispherical convex portion 24B formed as one body with this base 24A", "convex mirror 24 is produced by molding" and "convex portion 24B is produced by mirror finishing", (see column 3, lines 10-18). The claimed "hyperboloidal shape" is met by the convex reflecting surface, which can be parabolic. The claimed "surface portion which is not processed into a mirror surface are processed to block light" is met by the disk-like base 24A and/or the cylinder that lies between the convex surface 24B and disk-like base 24A which block light. And the diameter of the cylinder that lies between the convex surface 24B and disk-like base 24A is less than the diameter of disk-like base 24A.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiguro et al.

10. The Ishiguro et al. reference discloses an omni directional vision photograph device.

This device includes a convex mirror having any rotationally symmetrical shape "(i.e. quadratic curve or circular arc etc)", see column 2, lines 1-4. The convex mirror is fixed to one end of a cylinder and a camera is fixed to the other end thereof. The convex mirror and the cylinder are set forth as made of glass or plastic, column 2, lines 61-67. Ishiguro et al. sets forth "shape of

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this cylinder varies and it does not have to be a cylindrical shape as shown on this operation example.”

11. Thus Ishiguro et al. differs from the claimed invention in that the cylinder and convex mirror are not disclosed as integrally molded. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to integrally mold the convex mirror and cylinder, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

12. Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over King.

13. King discloses a convex mirror, reflector lens 10, mounted to a cylindrical support member 11 by a connection section, opaque disc 15.

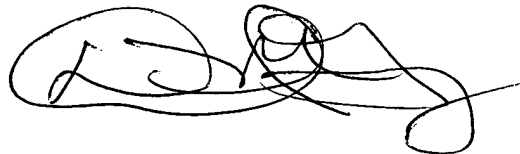
14. King differs from the claimed invention in that the cylinder and convex mirror are not disclosed as integrally molded. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to integrally mold the convex mirror and cylinder, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M Gray whose telephone number is 703-308-1698. The examiner can normally be reached on M-T & T-F 7:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

A handwritten signature in black ink, appearing to read 'David M Gray', with a large, stylized flourish extending to the right.

David M Gray
Primary Examiner
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February 21, 2003